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10/780,815	02/18/2004	Kevin M. Ferguson	7630 US 1	1492	
30078 7590 08/02/2010 MATTHEW D. RABDAU TEKTRONIX, INC. 14150 S.W. KARL BRAUN DRIVE P.O. BOX 500 (50-LAW)			EXAMINER		
			LE, TOAN M		
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# UNITED STATES PATENT AND TRADEMARK OFFICE

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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

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Ex parte KEVIN M. FERGUSON

Appeal 2009-002593 Application 10/780,815 Technology Center 2800

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Before ROBERT E. NAPPI, MARC S. HOFF, and ELENI MANTIS MERCADER, *Administrative Patent Judges*.

MANTIS MERCADER, Administrative Patent Judge.

DECISION ON APPEAL<sup>1</sup>

recited in 37 C.F.R. § 41.52, begins to run from the "MAIL DATE" (paper delivery mode) or the "NOTIFICATION DATE" (electronic delivery mode)

shown on the PTOL-90A cover letter attached to this decision.

The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or filing a request for rehearing, as

## STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134(a) from the Final Rejection of claims 1-5. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

#### **INVENTION**

Appellant's claimed invention is directed to automatically setting gain and offset for a signal based on a region of interest within the signal.

Maximum (Max) and minimum (min) values for the region of interest are determined and tested against respective clipping levels. If either value clips, then the gain and offset are adjusted. Alternatively if only one value clips in the signal, then only the offset is adjusted, while if both values clip then the gain is adjusted. The adjustments of the gain and offset continue until a maximum number of attempts is reached or neither max/min value within the region of interest is clipped. See Spec. 2:8-18.

Claim 1, reproduced below, is representative of the subject matter on appeal:

1. A method of automatically setting gain and offset for the measurement and display of a signal comprising the steps of: acquiring the signal;

defining a region of interest within the acquired signal;

determining max and min values for the acquired signal within the region of interest;

testing the max and min values for clipping on a display; calculating from the max and min values a gain and offset for the signal when either the max or min value clips in the testing step; and applying the gain and offset to the signal in the acquiring step.

#### THE REJECTION

The Examiner relies upon the following as evidence of unpatentability:

Odenheimer

US 4,743,844

May 10, 1988

The following rejection is before us for review:

The Examiner rejected claims 1-5 under 35 U.S.C. § 102(b) as being anticipated by Odenheimer.<sup>2</sup>

#### **ISSUES**

Appellant's argument (Ans. 11-12), addressed in the Analysis section *infra* in detail, gives rise to the following pivotal issue:

Does Odenheimer teach the limitation of "defining the region of interest within the acquired signal" as recited in representative claim 1?

## FINDINGS OF FACT

The Following Findings of Fact (FF) are supported by a preponderance of the evidence. We agree with the Examiner's Findings of Fact (Ans. 3-6) and we adopt them as our own, but we emphasize the following pertinent facts:

1. Appellant's Specification defines a region of interest within the signal as a portion of a video line - sync pulse, burst pulse, or active video

<sup>&</sup>lt;sup>2</sup> The Examiner withdrew (Ans. 2) the rejection of claims 1-5 under 35 U.S.C. § 101. Accordingly the § 101 rejection is not presented for Board review.

- according to a desired measurement and the signal acquired (Spec. 2:10-12).
- 2. Odenheimer teaches an input signal produced by a device and applied to an oscilloscope 10 (col. 6, ll. 24-26), determining the max/min values for the acquired signal (col. 14, l. 47-col. 15, l. 20) within the region of interest (i.e., searching within the portion of the signal between: the range of 0 and 4.75/2 Div. or 4.75/2.5 to 4.75 Div. for the Max. peak; and the range of 0 to -4.75/2 Div. or -4.75/2.5 to -4.75 Div. for the Min. peak).
- 3. Odenheimer teaches "determining the maximum and minimum peak levels of the input signal" (col. 14, ll. 47-49).

## PRINCIPLES OF LAW

Although claims are interpreted in light of the specification, limitations from the specification are not read into the claims. *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993).

#### **ANALYSIS**

Appellant argues that while measurements of min and max are described, there is no mention of "defining a region of interest within the acquired signal" (App. Br. 12).

We are not persuaded by Appellant's argument. Appellant's Specification defines *a region of interest* within the signal as *a portion* of a video line - sync pulse, burst pulse, or active video according to a desired measurement and the signal acquired (FF 1).

Odenheimer teaches an "input signal" produced by a device (i.e., acquired signal), determining the max/min values for the acquired signal within the region of interest (i.e., searching within the portion of the signal between: the range of 0 and 4.75/2 Div. or 4.75/2.5 to 4.75 Div. for the Max. peak; and the range of 0 to -4.75/2 Div. or -4.75/2.5 to -4.75 Div. for the Min. peak) (FF 2). Accordingly, we find that Odenheimer does teach "defining a region of interest within the acquired signal" as required by claim 1 because Odenheimer teaches searching within the portion of the acquired signal (i.e., portion of signal set by the ranges) for min/max values.

With respect to Appellant's statement regarding the Specification (page 2, line 21) referring to the max and min values within the region of interest to provide a superior display of that region *even when the signal outside the region of interest is allowed to clip* (App. Br. 12) as a distinction over the prior art, we note that the distinction is not commensurate in scope with the language of claim 1. Although claims are interpreted in light of the specification, limitations from the specification (i.e., to provide a superior display of that region *even when the signal outside the region of interest is allowed to clip*) are not read into the claims. *See Van Geuns*, 988 F.2d at 1184.

Appellant's further argument expresses a disagreement (App. Br. 11-12) with the Examiner's reliance on Figure 7, providing a detailed analysis of determining the maximum and minimum peak levels of the input signal, for meeting the limitation of "defining a region of interest within the acquired signal." Appellant points to step 162 of Figure 7 describing "SET MAIN AND WINDOW TRIGGER LEVEL TO MIN./MAX. MIDPOINT", and thereby argues that because it is well understood that the trigger prompts the

acquisition of the signal, Odenheimer has not even acquired a signal yet, but rather, "characterized the input signal to set a proper trigger" (App. Br. 11-12). Again we are not persuaded by Appellant's argument.

Odenheimer teaches "determining the maximum and minimum peak levels of the input signal" (FF 3) and the "input signal" was produced by a device and applied to an oscilloscope 10 (FF 2), and thereby, under the broadest reasonable interpretation, the input signal is an acquired signal. Even if we agreed with Appellant that the input signal is used to set a proper trigger that does not mean that the input signal is not an acquired signal.

Accordingly, we will affirm the Examiner's rejection of claim 1 under 35 U.S.C. § 102(b), and for similar reasons the rejection of claims 2-5, because Appellant has not advanced any other arguments with respect to these claims.

## **CONCLUSIONS**

Odenheimer teaches the limitation of "defining the region of interest within the acquired signal."

Appeal 2009-002593 Application 10/780,815

# **ORDER**

The decision of the Examiner to reject claims 1-5 under 35 U.S.C. § 102(b) is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

# **AFFIRMED**

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